

Literature Review: Bulletin Media in Learning as a Literacy Resource in Strengthening the National Literacy Movement Program

Dewi Satria Ahmar¹, Muhammad Fath Azzajjad²

¹Department of Chemistry Education, Faculty of Teacher Training and Education, Tadulako University, Palu, Indonesia

²Department of Chemistry Education, Faculty of Teacher Training and Education, Universitas Sembilanbelas November Kolaka, Kolaka, Indonesia

Author Email: dewisatriaahmar@gmail.com¹, muhhammad.fath86@gmail.com²

Orcid: <https://orcid.org/0000-0003-2537-3674>¹, <https://orcid.org/0000-0002-9131-3437>²

Abstract. Through a survey of numerous articles connected to bulletin media in learning, this study intends to provide information on the utilization and development of bulletins as a learning medium. This study is classified as a literature review. The information data used was collected from scientific journals accredited by the Science and Technology Index (SINTA). The information was gathered by analyzing published data from 2016 through 2022. Researchers examined, analyzed, and collaborated to evaluate, assemble, and review the results. Choosing nine journal papers that investigate the use and development of bulletins as learning media. 9 articles were picked at random to represent the chosen theme research, namely the use and development of bulletin media. The literature review includes information on the title of the scientific article, the author, the source of the journal publication, the methods used, the findings, and the review's recommendations in describing specific concepts and explanations that are still missing from the essence of the scientific article. This scientific article review is meant to serve as a source of inspiration for educational progress through the use of various media in molding excellent education in accordance with national goals.

Keywords: Bulletin, Literacy, Learning, Literature, Review.

1 Introduction

Access to learning media and technology is often limited in many countries, especially in rural or remote areas. In addition to limited internet infrastructure, a lack of computer or smartphone devices can be a huge challenge. Educational media that do not fit the curriculum or local culture can be problematic. Learning media can be less effective if the content does not match the needs or context of teachers and students. Gender inequality in access to learning media is still an issue in some countries. Access and use of learning media may be difficult for women. Article 40 of National Education System Law No. 20 of 2003; 2, Educators and education workers are responsible for creating a meaningful, enjoyable, creative, dynamic, and dialogical educational environment. The National Education System Learning Law promotes dynamic learning through creative techniques, reducing monotony in acquiring varied learning facts. Boredom leads to kids not understanding what instructors are saying, therefore using media as a teaching tool is necessary to counteract this. Learning media with a variety of qualities will undoubtedly serve as a source of representation in getting factual learning information. Learners will become bored with monotonous learning medium [1]. Inculcating knowledge is crucial because it is the potential that will be the capital for the success of learners in the future [2]. Creative thinking is built from the habit of seeking and finding knowledge independently [3]. The idea of building creativity is a challenge in facing the era of disruption, massive change raises various problems in learning [4]. The curriculum interprets noteworthy development in order to assist learners in a planned learning experience and respond to obstacles in the digital world [5]. Boring and stagnant learning exercises drive learners to become sluggish and tired, and they engage in numerous behaviors that regress learning successes. The need to pay attention to media use and the selection of attractive and contextual learning models is the solution to this problem.

Bulletins are one of the effective ways to provide information and learning solutions around the world. However, it is important to remember that newsletters are not always the best choice [6]; their effectiveness varies depending on the context, target audience, and learning objectives [7]. To fulfill the needs and desires of the audience, readers can design newsletters to deliver content that suits their needs. Bulletins can contain interactivity components such as quizzes, questions, or tasks. Bulletins can still encourage students to think and engage, although they are not as interactive as sophisticated online learning platforms. When compared to complex web-based technologies, newsletter maintenance is easier [8]. It can be a more efficient choice in situations where resources are limited. Newsletters can provide information and materials in an organized order, allowing readers to understand concepts gradually.

The evolution of the use of various learning media has colored the world of education; various media have been thought of innovatively in providing learning experiences that are relevant to the lives of learners [9]; however, what learners require is not only sophistication but also practical nature, efficiency, and effectiveness in teaching. Media undoubtedly aids learners in finding various types of information-theoretically, procedurally, and metacognitively [10]. The potential of using media with practical, efficient, and effective attributes as a source of innovation in developing learning media with varied aspects such as colors, graphics, and good text variants [11] is an appropriate consideration. Bulletin is a media with practical, efficient, and effective properties in use. Learning media in the form of a bulletin is a media that has the potential to help achieve competence and productivity [12]. The presence of bulletins will organize learning motivation and give a practical impression on the presentation of information provided.

Bulletins as a learning media can give an intriguing learning aspect that can be used both inside and outside of the academic context. The bulletin facilitates the exploration of new knowledge information in learning, and the practical presentation of material assists learners in mapping knowledge systematically and independently. The efficiency of time required to understand the educational content will be improved by examining concepts holistically and genuinely [13]. The usage of media influences learner achievement; the presentation of difficult material will undoubtedly alter the level of saturation of learners to obtain the necessary knowledge. Learning problems in the form of boredom and literacy motivation will cause misconceptions to mental pressure in receiving learning materials [14], the solution offered is bulletin media that can build literacy skills and motivate literate learners. Effective learning media can determine learning outcomes and become a tool to convey the source of knowledge presented by considering changing the complexity of the material to be more practical and simple [15]. The innovation of bulletin media utilization provides more meaningful learning by considering the condition of learners who generally prefer simple and meaningful messages.

The message to be transmitted in the bulletin incorporates concepts with numerous attractive aspects in the form of photos, colors, and text alterations will be an attraction that promotes achievement in the learning process. Stimulating the attraction of literacy is undoubtedly difficult, requiring a variety of tactics tailored to the needs of the object. The ability to convey and manage information is defined as literacy [16]. Low interest, motivation, and learning outcomes are one of the considerations for optimizing the use of available technological facilities, as well as adjusting to the development of science which is expected to bring progress in the world of education in accordance with national ideals, namely educating the nation's life. A journal literature review is a research process that involves analyzing and synthesizing various scholarly articles or journals that have been published on a particular topic. A literature review helps researchers or readers to understand the current status of research in a particular field. It allows them to know what has been achieved previously, existing research trends, and key issues that remain unsolved. In a literature review, researchers can identify gaps in existing research. They can see where previous research has not touched or provided adequate solutions to a particular problem. This can be the basis for designing new research. The literature review helps in building a strong theoretical foundation. By examining theories that have been published in the literature, researchers can deepen their understanding of the relevant theoretical framework. A literature review can help confirm or support existing research findings. This can give more validity and reliability to the research results. By understanding the existing literature, researchers can avoid unnecessary duplication of research. They can find out if the topic they want to research has been explored before.

Journals that constantly update and maintain their quality standards outperform journals that are inactive or endure significant changes in editorial policy. It is crucial to note that the quality of a journal is determined by a number of factors. High-quality scientific research, reputation, and adherence to good scientific principles are typically among the criteria that contribute to a journal's quality. Furthermore, quality perceptions may differ between individuals and various scientific communities. As a result, choosing a journal in which to publish an article or referring to a specific journal should be based on a thorough analysis of these variables. A high-quality paper is essential for finishing a study or research. An excellent piece of writing can provide various benefits that will help complete the study.

Quality publications are often published in renowned journals after a rigorous peer review procedure. This implies that the material has been evaluated and verified by experts in the subject, so you can rely on the

information's accuracy and reliability. A good article will discuss the study approach in adequate detail. A good article will provide a detailed analysis of the facts or information acquired [17]. You can learn how to conduct an effective analysis and utilize proper ways to assess the outcomes.

2 Methods

Researchers can benefit from performing a literature review before beginning their own research. As a result, higher-quality, more relevant research can be produced. A literature review assists the reader in considering an issue or topic from multiple perspectives. This contributes to the development of a more comprehensive grasp of a certain subject. The literature review is an important step in the preparation of a scientific publication or research report for authors. It provides a solid foundation for the concepts and logic in the scientific activity. The papers for the study were selected utilizing the data retrieval approach on the website <https://sinta.kemdikbud.go.id/>. SINTA is a nationwide platform created by the Ministry of Research, Technology, Education, and Culture to track the progress of research in a variety of scientific domains. The articles are then sorted, with care given to the selection of articles from Sinta-accredited publications, the theme of the article, and the usefulness of the study material. The data gathered is then used as a reference in the literature review, with the topic of study material being the use of bulletins in learning. The data included in the article is limited to the years 2019 to 2022, with terms related to the subject, particularly numeracy literacy. Many educational activists are concerned about numeracy literacy nowadays because it is the foundation of many scientific fields. Numeracy literacy is restricted to the formal environment. 9 scientific publications (N=9) were chosen through a selection process that was deemed relevant to the goal of the literature review. The empirical features of using the findings of the analysis and measurement of numeracy literacy skills as a theoretical reference were considered while developing the qualifying criteria. The researcher then assesses, compiles, and refines the findings.

This study employs research methodologies consistent with the aims and involves a review of papers on the theme Bulletin Media in Learning as a Literacy Resource in Strengthening the National Literacy Movement Programme. A comparison technique is also used in this study to assess scientific papers indexed in SINTA (Science and Technology Index).

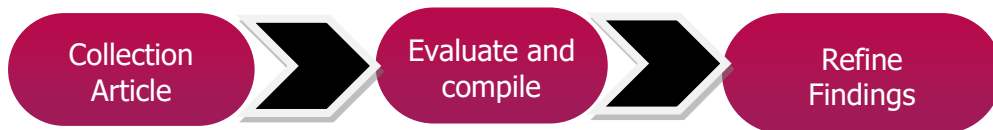


Figure 2: Literature Review Procedure

3 Result and Discussion

The collection of articles was carried out through a filtering process to focus on the topic of review of selected articles. The following is representative information on the articles to be reviewed.

Table 1. The Articles Reviewed in the Literature Study are:

Author	Research Title	Research journal
(Asyhari & Silvia, 2016) [18]	Pengembangan Media Pembelajaran Berupa Buletin Dalam Bentuk Buku Saku Untuk Pembelajaran Ipa Terpadu	Jurnal Ilmiah Pendidikan Fisika Al-BiRuNi 05 (1) (2016) 1-13
(Cicik Setyawati, 2016) [19]	Penerapan Model Pembelajaran Discovery Berbantuan Buletin Untuk Meningkatkan Kemampuan Berpikir Logis	Jurnal Pendidikan MIPA (2016)
(Riswanti, 2016) [1]	Media Buletin Dan Seni Mural Dalam Upaya Meningkatkan Pengetahuan Tentang Obesitas	Journal of Health Education 1 (1) 2016
(Purnomo, 2017) [20]	Pengembangan Buletin Kampus Bermuatan Nilai Kebhinekaan Pancasila untuk Menangkal Radikalisme pada Mahasiswa STKIP Darussalam Cilacap	Lingua XIII (2) (2017)

Author	Research Title	Research journal
(Julianda, 2020) [21]	Pengembangan Media Pembelajaran Berbentuk Buletin pada Materi Koloid di Kelas XI SMA Negeri 12 Banda Aceh	Jurnal Ilmiah Mahasiswa Pendidikan Kimia (JIMPK)- Vol 2. No.1 (83-90) (2017)
(Savitri, 2018) [22]	Kajian Bibliometrik Terhadap Karakteristik Kepengarangan Dan Artikel Pada Buletin Pertanian Perkotaan	Jurnal Perpustakaan Pertanian Vol. 27 No. 1 Juni 2018: 23-29
(Habibati et al., 2020) [12]	Pengembangan Media Buletin Menggunakan Coreldraw X7 pada Materi Pencemaran Lingkungan	Jurnal Pendidikan Sains Indonesia, Vol. 07, No.01, hlm 23-33, 2019
(Mikraj et al., 2019) [23]	Pengaruh Buletiin Fiisiika Berbentuk Buku Saku Untuk Meningkatkan Hasil Belajar Siiswa Dii Man 2 Biima Kelas X Materii Hukum Newton Tahun Pelajaran 2018//2019	Jurnall Hasiill Kajiian,, Inovasii,, dan Aplliikasii Pendiidiikan Fiisiika Volume 5,, Nomorr 1,, Meii 2019.
(Rachmawati et al., 2021) [24]	Pengembangan Media Buletin Matematika Berbasis Pendekatan Realistik Pada Siswa Sekolah Dasar	Jurnal Pendidikan dan Pembelajaran Matematika Vol. 3, No. 1, Juni 2021

The selected literature review articles are then mapped to their relevant study strategies. The study of nine literature reviews as a whole employs research by focusing on learning objects that occur at various levels of education and the creation of bulletin media. The literature review study includes both quantitative and developmental research. The articles published in a journal are a major role in establishing the publication's quality. They must meet stringent scientific criteria, such as excellent technique, thorough analysis, and a significant contribution to a specific field of study. Journals with a high impact factor and that are indexed in recognized scientific databases such as Web of Science or Scopus are usually considered to be of high quality. A factor of impact is how often articles in the journal are cited in the scientific literature.

Table 2: Research Methods of Review Articles

Author	Research Methods
(Asyhari & Silvia, 2016) [18]	(Research and Development). The purpose of this development research method is used to produce products, as well as find out how science teachers and students and teachers respond to Integrated Science bulletin products on sound material developed for grade VIII junior high school students.
(Cicik Setyawati, 2016) [19]	Quasi-experimental quantitative research with the design form "Nonequivalent Control Group Design"
(Riswanti, 2016) [1]	Quasi Experimental Design with Pretest-Posttest Control Group Design.
(Purnomo, 2017) [20]	Research and Development (R&D) Method.
(Julianda, 2020) [21]	Qualitative Approach with Descriptive Research Type.
(Savitri, 2018) [22]	A bibliometric approach was used to analyze the studied wireless, namely the distribution of articles, the profession of authors, the subject of articles, the currency of literature citations, the type of citation sources, the degree of collaboration of authors, and the productivity of authors.
(Habibati et al., 2020) [12]	Research And Development (R&D) With Using the ADDIE Development Model
(Mikraj et al., 2019) [23]	Quasi Experiment Research with Control Group Design Method
(Rachmawati et al., 2021) [24]	Development research (Reserch and Development), namely the ADDIE model which consists of 5 development stages including Analysis or analysis, Design or planning, Development or development, Implementation or application, and Evaluation or evaluation.

Table 3. Literature Review Research Subjects

Author	Research subject
(Asyhari & Silvia, 2016) [18]	VIII grade students of SMP Negeri 7 Bandar Lampung and SMP Negeri 21 Bandar Lampung totaled 40 students.
(Cicik Setyawati, 2016) [19]	SMA N 1 Cepudengan sample class XI MIPA 4 as the control class and class XI MIPA 5 as the experimental class, sample selection using cluster random sampling technique, which is randomly selected based on class.
(Riswanti, 2016) [1]	Islamic Elementary School Al-Azhar 14 Semarang. The samples of this study were grade 4A, 4B and 4C students totaling 60 children who were divided into 3 research groups with inclusion criteria.
(Purnomo, 2017) [20]	The research was conducted at STKIP Darussalam Cilacap.
(Julianda, 2020) [21]	This research focuses on the responses of SMA Negeri 12 Banda Aceh teachers to the development of bulletin media on colloidal material. This research was conducted at SMA Negeri 12 Banda Aceh from December 2015 to December 2016. The subjects in this study were 3 chemistry teachers at SMA Negeri 12 Banda Aceh.
(Savitri, 2018) [22]	The review was conducted on the Urban Agriculture Bulletin published period 2011-2016. A bibliometric approach was used to analyze the wireless studied, namely the distribution of articles, the profession of the author, the subject of the article, the currency of literature citations, the type of citation source, the level of author collaboration, and author productivity.
(Habibati et al., 2020) [12]	The subjects in this study were 2 (two) material expert validators from the chemistry education department of FKIP Unsyiah, 1 (one) media expert, and 3 (three) science teachers of SMPN 1 Indrapuri and 3 (three) science teachers of SMPN 2 Indrapuri. Determination of research subjects was carried out by purposive sampling (sample selection based on certain considerations).
(Mikraj et al., 2019) [23]	Class XA MAN 2 BIIMA as an experimental class of 28 students and class XB as a control class of 28 students.
(Rachmawati et al., 2021) [24]	The research subjects were 10 students at Pelutan State Elementary School, Gebang District, Purworejo Regency. This research was conducted in the odd semester of the 2020/2021 academic year.

In general, all articles have provided information on the existence of observations prior to determining the research subject, the observation techniques used, such as participatory observation or data collection by observing or observing the subject's habits, group observation or observing the issues behind the research (object of research), unstructured observation or not adhering to observation rules, so that researchers can monitor developments in the field.

Table 4. Evaluation of Literature Review Research Results

Author	Research Results	Recommendations
(Asyhari & Silvia, 2016) [18]	1) learning media in the form of integrated science bulletins in the form of pocket books have been developed; 2) the feasibility of integrated science bulletin learning media in the form of pocket books that have been developed is very feasible with a percentage of 82% based on the assessment of material experts in the final stage after improvement, design experts with a percentage of 79.4% with feasible criteria 3) with a percentage of 77.6%, teacher assessment with criteria is feasible 4) the results of student responses with a percentage of 80% with feasible criteria.	To ease information comprehension, it is required to include in the discussion of bulletin objects (in the form of photos of enhanced bulletin sheets) before and after the expert validation process with systematic explanations.
(Cicik Setyawati, 2016) [19]	The discovery learning model assisted by bulletin has an effect on students' logical	It should be reinforced in the introduction by methodical

Author	Research Results	Recommendations
(Riswanti, 2016) [1]	<p>thinking ability. From the analysis of the four indicators of logical thinking ability, it is known that the highest effect of discovery learning model assisted by bulletin is on the fourth indicator, namely syllogism, while the lowest effect is on the third indicator, namely conditional.</p> <p>Nutrition counseling with bulletin media and mural art is effective in increasing elementary school children's knowledge about obesity.</p>	<p>preparation from general to specific to make it more structured. It should be strengthened in the introduction by describing problems that correspond with the research in detail.</p> <p>The presentation in the discussion section is very detailed, but the conclusions in the abstract still contradict the type of research conducted. The conclusion leads to class action research (PTK) but the type of research conducted is quantitative.</p>
(Purnomo, 2017) [20]	<p>(1) 45% of students do not know the right concept of Pancasila Diversity, (2) Students need a campus bulletin equipped with a student voice column, (3) Research has succeeded in developing a campus bulletin with the name "WOLES" and (4) Campus bulletins are proven to be able to ward off radicalism from inside and outside the campus. The development of the campus bulletin "WOLES" is a positive synergy between word processing skills and feelings for students.</p>	<p>The article has provided a complete and detailed explanation in accordance with the direction of the research method.</p>
(Julianda, 2020) [21]	<p>1. This study produces a product in the form of a bulletin media on colloidal material which has a percentage value of validity from two validators on all aspects of 87.46%. The bulletin media on colloidal material is very feasible to use as teaching material.</p> <p>2. The teacher's response to the bulletin media of colloidal material can be interpreted very well. The percentage value of feasibility obtained is 86.90%.</p>	<p>There needs to be reinforcement of the main reference source in the introduction to detail the correlation of the reasons for the development research being carried out.</p>
(Savitri, 2018) [22]	<p>A total of 1,040 references were found in this newsletter and 701 references were more than 5 years old.</p> <p>The subject of cultivation (552 references) has the most references compared to other subjects. Meanwhile, Yudi Sastro with 21 articles was the most productive author.</p>	<p>There is no explanation of the distinction between bulletins and magazines in the article, giving the impression that bulletins and magazines are substantially the same.</p>
(Habibati et al., 2020) [12]	<p>(1) the average percentage of validation from two material expert validators of 91.07% is included in the very feasible category, and the average percentage value of the media expert is 75% (feasible category), (2) the average percentage of feasibility of the teacher's response to the bulletin media is 96.43% including the very good category, and (3) the bulletin media that has been developed is feasible and can be used as learning media on environmental pollution material.</p>	<p>The test results measured were only feasibility tests, not measuring practicality and effectiveness tests to strengthen the relevance of using bulletin media.</p>

Author	Research Results	Recommendations
(Mikraj et al., 2019) [23]	"There is an effect of a physics bulletin in the form of a pocket book on improving the learning outcomes of class X students of MAN 2 Bima on the material of Newton's law in the 2018/2019 school year".	The research method does not include information on the number of samples. It is recommended that the article provide information on the number of samples to represent the sample category in the research conducted.
(Rachmawati et al., 2021) [24]	The development of bulletin media based on the realistic approach was carried out using the ADDIE model. The feasibility of mathematics bulletin media based on a realistic approach to grade IV elementary school students. Mathematics bulletin media based on a realistic approach to grade IV elementary school students is developed worthy of use because it meets the criteria of valid, practical and effective. Based on the validity test by media experts, material experts, and teachers got an average score of 3.58 with a valid category. Practicality test through student response questionnaire with a percentage score of 98% and categorized as good practicality and learning completeness is 100%.	Data analysis is only done through validity tests and student responses, there should be a test of practicality and effectiveness to strengthen the research conducted in media development.

The researcher's interpretation presents a descriptive report in response to the occurrence [25], addressing concerns pertinent to the subject of study, namely the development of bulletin media and quantitative research by utilizing bulletins as a treatment in learning. In contrast to qualitative research, quantitative research interpretation is done out utilizing the findings of mathematical measurements [26] during the data sorting process. In general, development research continues to dominate research on bulletin objects.

In general, the review of research publications has answered the research objectives [27]. All articles have relied on in-depth observations to develop phenomena that are thoroughly discussed. The research demonstrates data gathering by referring to questions to problems created by researchers, data reduction or categorization has been properly done, and generating conclusions has used the outcomes of information triangulation [28] The analysis of all development and quantitative research papers revealed the association between the components studied in the study. The research has been linked by looking at the conditions and developments of the results of interviews and other data review [29], which shows that the research has described the conclusions with the necessary measurements and analysis, but it is still found that the article has not completed the test process, namely the effectiveness and practicality of the bulletin media development, so that it only provides a validity test conclusion. According to the development research statement, clarity in interpretation is highly dependent on the process and testing of the product or model. The legitimacy of the notion of researchers and informants must be established by triangulation by assessing the acquired data [30]. The discussion has provided information related to problem identification, relevant literature studies, a directed research conceptual framework, but not so detailed in the identification of variables and research design.

4 Conclusion

This review study chose 9 scientific publications based on the indexation of journal published articles that were included in the reputable or nationally indexed category. There are four articles that use development research, three that use quantitative research, one that uses bibliometric wireless research, and one that uses a qualitative approach. Based on information obtained from Google Scholar searches, development research on bulletin media studies continues to dominate. The bulletin in learning still provides a concluding direction that is not generally employed in the learning process. Regarding the recommendations in the article for the development research test, it has not used the effectiveness and practicality test of bulletin media, it is only limited to conducting validity tests, so it appears that it has not strengthened the media development process in a

sustainable manner, there are still scientific publication articles that have not included the number of samples, so the relevance has not been able to organize a representative

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